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David Lawrence Von Killeck

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/710,008
Filing Date: June 11, 2004
Appellant(s): VON KLEECK, DAVID LAWRENCE

Jeffery M. Furr, Esq. (Reg. No. 38,146)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 5/14/2009 appealing from the Office action mailed 1/12/2008.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is deficient. 37 CFR 41.37(c)(1)(v) requires the summary of claimed subject matter to include: (1) a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number, and to the drawing, if any, by reference characters and (2) for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to

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the drawing, if any, by reference characters. The brief is deficient because **Figure 4 does not exist. The examiner suggests that appellant intended each reference to Figure 4 to instead refer to Figure 3. Otherwise, the Summary of Claimed Subject Matter is acceptable, though narrower than the claims require.**

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 42-44 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Neuneier** (USPN 6,317,730) and **Zizzamia** (USPAP 2004/0054553) in view of **Tewari** (USPN 6,004,267).

Claims 42:

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Neuneier teaches:

- inputting data (C1-8 especially i.e. “input data” C5:35-50);
- having a Model identification step review said data and output results (C1-8 especially i.e. “output value” C4:30-60 or “modeling” C1:1-20 or “membership functions” C4:60-C5:10 or “mapping” C5:25-35 or “actual output value of the neural network” C5:55-67);
- having a Model parameter estimation step review said output results (C1-8 especially i.e. “training” C5:35-60 or “parameter” C5:35-60 or “new rule” C2:40-60); and
- outputting final results (C1-8 especially i.e. “new fuzzy rule set NFR is thereby characterized by the new neural network NNN” C8:1-30)
- where said model identification step comprises identifying by decision nodes (C1-8 especially i.e. “neuron” C4:30-55) and
- uses artificial neural networks to review said data (C1-8 especially i.e. “neural network” throughout),
- where said model parameter estimation step uses machine learning to review said output results (C1-8 especially i.e. “training” C5:35-60 or “learning” C7:45-60).

Neuneier fails to teach:

- the system being for hiring an employee;
- where said results have two states.

Zizzamia teaches:

- the system being for hiring an employee (p1-11 especially i.e. “recruiting, hiring and appointing new insurance agents” ¶8 or “company would appoint an agent based on the agent’s ability to produce future profits and increase productivity” ¶14 or “identifying productive and profitable agents” ¶18 or “used for various business purposes (e.g., recruiting ...) ... to generate a statistical model that can be used to predict future profitability and productivity of licensed professionals (the ‘predictive statistical model’)” ¶27; *Although taught by the cited prior art in the interest of compact*

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prosecution, the examiner further points out that an intended use in a claim preamble need not be given any patentable weight).

Rationale:

Neuneier and **Zizzamia** are from the same field of endeavor, predictive data modeling/processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of **Neuneier** by using the system for hiring an employee as taught by **Zizzamia** for the benefit of employing data sources to develop a global producer database and model predictive of the future profitability and productivity of licensed professionals such as insurance agents to increase future profits and productivity by appropriate hiring/recruiting (**Zizzamia** especially i.e. ¶¶14, 18, & 21).

The combination of **Neuneier** and **Zizzamia** teaches scoring and classifying potential employees/agents (see **Zizzamia** especially i.e. ¶2 or ¶13 or ¶19 or ¶26 or ¶31 or ¶¶36-41 or ¶¶93-112), but fails to explicitly teach:

- where said results have two states.

Tewari teaches:

- Where said results have two states (C1-21 especially i.e. "Classification. This is a special case of vector mappings which has a broad range of applications. Here, the network operates to assign each input vector to a category. A classification is implemented by modifying a general vector mapping network to produce mutually exclusive primary outputs" C9:1-6 or "to classify the noisy ... data into groups, ... a probabilistic neural network was chosen ... probabilistic Neural Network (PNN) separates data into a specified number of output categories ... PNNs are known for their ability to train quickly on sparse data sets and separate data into a specified number of output categories" C11:14-55 or "binary probability predictions" C12:60-C13:5 or Figure 1 and the associated discussion in the disclosure; *Although taught by the cited prior art in the interest of compact prosecution, the examiner points out that the number of states is a design choice, and further that as presently constructed, the claim really only requires at least two states).*

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Rationale:

Tewari and the combination of **Neuneier** and **Zizzamia** are from the same field of endeavor, predictive data modeling/processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of **Neuneier** and **Zizzamia** by having two states for the results as taught by **Tewari** for the benefit of quickly training and separating data into a specified number of output categories (**Tewari** especially i.e. C11:40-54).

Claims 50:**Neuneier** teaches:

- inputting data (C1-8 especially i.e. "input data" C5:35-50);
- having a Model identification step review said data and output results (C1-8 especially i.e. "output value" C4:30-60 or "modeling" C1:1-20 or "membership functions" C4:60-C5:10 or "mapping" C5:25-35 or "actual output value of the neural network" C5:55-67);
- having a Model parameter estimation step review said output results (C1-8 especially i.e. "training" C5:35-60 or "parameter" C5:35-60 or "new rule" C2:40-60); and
- outputting final results (C1-8 especially i.e. "new fuzzy rule set NFR is thereby characterized by the new neural network NNN" C8:1-30)
- where said model identification step comprises identifying by decision nodes (C1-8 especially i.e. "neuron" C4:30-55) and
- uses fuzzy inference systems to review said data (C1-8 especially i.e. "fuzzy rule set" C4:30-55),
- where said model parameter estimation step uses machine learning to review said output results (C1-8 especially i.e. "training" C5:35-60 or "learning" C7:45-60).

Neuneier fails to teach:

- the system being for hiring an employee;
- where said results have two states.

Zizzamia teaches:

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- the system being for hiring an employee (p1-11 especially i.e. “recruiting, hiring and appointing new insurance agents” ¶8 or “company would appoint an agent based on the agent’s ability to produce future profits and increase productivity” ¶14 or “identifying productive and profitable agents” ¶18 or “used for various business purposes (e.g., recruiting ...) ... to generate a statistical model that can be used to predict future profitability and productivity of licensed professionals (the ‘predictive statistical model’)” ¶27; *Although taught by the cited prior art in the interest of compact prosecution, the examiner further points out that an intended use in a claim preamble need not be given any patentable weight*).

Rationale:

Neuneier and **Zizzamia** are from the same field of endeavor, predictive data modeling/processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of **Neuneier** by using the system for hiring an employee as taught by **Zizzamia** for the benefit of employing data sources to develop a global producer database and model predictive of the future profitability and productivity of licensed professionals such as insurance agents to increase future profits and productivity by appropriate hiring/recruiting (**Zizzamia** especially i.e. ¶¶14, 18, & 21).

The combination of **Neuneier** and **Zizzamia** teaches scoring and classifying potential employees/agents (see **Zizzamia** especially i.e. ¶2 or ¶13 or ¶19 or ¶26 or ¶31 or ¶¶36-41 or ¶¶93-112), but fails to explicitly teach:

- where said results have two states.

Tewari teaches:

- Where said results have two states (C1-21 especially i.e. “Classification. This is a special case of vector mappings which has a broad range of applications. Here, the network operates to assign each input vector to a category. A classification is implemented by modifying a general vector mapping network to produce mutually exclusive primary outputs” C9:1-6 or “to classify the noisy ... data into groups, ... a probabilistic neural network was chosen ... probabilistic Neural Network

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(PNN) separates data into a specified number of output categories ... PNNs are known for their ability to train quickly on sparse data sets and separate data into a specified number of output categories" C11:14-55 or "binary probability predictions" C12:60-C13:5 or Figure 1 and the associated discussion in the disclosure; *Although taught by the cited prior art in the interest of compact prosecution, the examiner points out that the number of states is a design choice, and further that as presently constructed, the claim really only requires at least two states).*

Rationale:

Tewari and the combination of **Neuneier** and **Zizzamia** are from the same field of endeavor, predictive data modeling/processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of **Neuneier** and **Zizzamia** by having two states for the results as taught by **Tewari** for the benefit of quickly training and separating data into a specified number of output categories (**Tewari** especially i.e. C11:40-54).

Claim 43 and 51:

- Where said states are hire and do not hire (*These claims are directed toward non-functional descriptive material which does not further limit the claims. Assigning labels or names to the states does not change the functionality of the invention. Furthermore, naming the states does not require nor necessarily imply or require that the claimed invention actually be used to determine if a particular potential employee is hired or not. However, the person of ordinary skill in the art at the time the invention was made would have found this naming structure obvious in light of the cited prior art. Specifically, **Zizzamia** teaches a classifying potential employees/agents (especially i.e. ¶8 or ¶14 or ¶18 or ¶27) and **Tewari** teaches a two state output (especially i.e. C9:1-6 or C11:14-55 or C12:60-C13:5 or Figure 1 and the associated discussion in the disclosure). Figure 1 of **Tewari** clearly shows receiving input information about individuals (e.g. age, intelligence, education, income, etc.) and outputting a binary classification consisting of "winner" or "loser". Examiner asserts that for the person of ordinary skill in the art at the time the*

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*invention was made would have logically understood, and found extremely obvious, naming the binary states of the combination of **Neuneier** and **Zizzamia** and **Tewari** to be “hire” and “do not hire”, or a substantial equivalent thereof).*

Claims 44 and 52:

Zizzamia teaches:

- Where said data is biographical data (p1-11 especially i.e. “historical producer data” ¶19; *Although taught by the cited prior art in the interest of compact prosecution, the examiner points out that this claim limitation is directed toward non-functional descriptive material which does not further limit the claims. Assigning labels or names to the data does not change the functionality of the invention).*

Claim Rejections - 35 USC § 103

Claims 45 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Neuneier** (USPN 6,317,730), **Zizzamia** (USPAP 2004/0054553), and **Tewari** (USPN 6,004,267) in view of **Mascarenhas** (USPAP 2002/0029162).

Claim 45 and 53:

The combination of **Neuneier**, **Zizzamia**, and **Tewari** fails to teach:

- Where said data is personality data.

Mascarenhas teaches:

- Where said data is personality data (p1-13 especially i.e. “Personality Trait Topography” ¶63 or “psychological, behavioral, personality, or other attributes” ¶51; *Although taught by the cited prior art in the interest of compact prosecution, the examiner points out that this claim limitation is directed toward non-functional descriptive material which does not further limit the claims. Assigning labels or names to the data does not change the functionality of the invention).*

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Rationale:

Mascarenhas and the combination of **Neuneier**, **Zizzamia**, and **Tewari** are from the same field of endeavor, predictive data modeling/processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of **Neuneier**, **Zizzamia**, and **Tewari** by using personality data as taught by **Mascarenhas** for the benefit of matching users with target information such as career openings (**Mascarenhas** especially i.e. ¶17).

Claim Rejections - 35 USC § 103

Claims 46-47 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Neuneier** (USPN 6,317,730) in view of **Mascarenhas** (USPAP 2002/0029162).

Claim 46:

Neuneier teaches:

- inputting data (C1-8 especially i.e. “input data” C5:35-50);
- having a Model identification step review said data and output results (C1-8 especially i.e. “output value” C4:30-60 or “modeling” C1:1-20 and “membership functions” C4:60-C5:10 or “mapping” C5:25-35 or “actual output value of the neural network” C5:55-67);
- having a Model parameter estimation step review said output results (C1-8 especially i.e. “training” C5:35-60 or “parameter” C5:35-60 or “new rule” C2:40-60); and
- outputting final results (C1-8 especially i.e. “new fuzzy rule set NFR is thereby characterized by the new neural network NNN” C8:1-30)
- where said model identification step comprises identifying by decision nodes (C1-8 especially i.e. “neuron” C4:30-55) and
- uses artificial neural networks to review said data (C1-8 especially i.e. “neural network” throughout),

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- where said model parameter estimation step uses machine learning to review said output results (C1-8 especially i.e. "training" C5:35-60 or "learning" C7:45-60).

Neuneier fails to teach:

- the system being for hiring an employee;
- where said results have three states.

Mascarenhas teaches:

- the system being for hiring an employee (p1-13 especially i.e. ¶Abstract or "match users with ... career openings" ¶7 or ¶8 or ¶78 or ¶90 or ¶93; *Although taught by the cited prior art in the interest of compact prosecution, the examiner further points out that an intended use in a claim preamble need not be given any patentable weight*)
- where said results have three states (p1-13 especially i.e. "three states" ¶24; *Although taught by the cited prior art in the interest of compact prosecution, the examiner points out that the number of states is a design choice unless the states are used in some way that creates significance in their being three states, and further that as presently constructed, the claim really only requires at least three states*).

Motivation:

Neuneier and **Mascarenhas** are from the same field of endeavor, data processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of **Neuneier** by having three states for the results as taught by **Mascarenhas** for the benefit of accounting for uncertainty in the observation technology (**Mascarenhas** especially i.e. ¶24).

Claim 47:

Mascarenhas teaches:

- Where said states are no not move forward, move forward with caution and move forward (p1-13 especially i.e. "selectively upregulated, selectively downregulated, or unchanged" ¶24; *Although*

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the prior art uses different names/labels for the states, the examiner points out that this claim is directed toward non-functional descriptive material which does not further limit the claims.

Assigning labels or names to the states does not change the functionality of the invention).

Claim 49:**Mascarenhas** teaches:

- Where said data is personality data (p1-13 especially i.e. “Personality Trait Topography” ¶63 and “psychological, behavioral, personality, or other attributes” ¶51; *Although taught by the cited prior art in the interest of compact prosecution, the examiner points out that this claim limitation is directed toward non-functional descriptive material which does not further limit the claims. Assigning labels or names to the data does not change the functionality of the invention).*

Rationale:

Mascarenhas and the combination of **Neuneier**, **Zizzamia**, and **Tewari** are from the same field of endeavor, predictive data modeling/processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of **Neuneier**, **Zizzamia**, and **Tewari** by using personality data as taught by **Mascarenhas** for the benefit of matching users with target information such as career openings (**Mascarenhas** especially i.e. ¶7).

Claim Rejections - 35 USC § 103

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Neuneier** (USPN 6,317,730) and **Mascarenhas** (USPAP 2002/0029162) in further view of **Zizzamia** (USPAP 2004/0054553).

Claim 48:The combination of **Neuneier** and **Mascarenhas** fails to teach:

- Where said data is biographical data.

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Zizzamia teaches:

- Where said data is biographical data (p1-11 especially i.e. “historical producer data” ¶19;
Although taught by the cited prior art in the interest of compact prosecution, the examiner points out that this claim limitation is directed toward non-functional descriptive material which does not further limit the claims. Assigning labels or names to the data does not change the functionality of the invention).

Rationale:

Zizzamia and the combination of **Neuneier** and **Mascarenhas** are from the same field of endeavor, predictive data modeling/processing. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combined teachings of **Neuneier** and **Mascarenhas** by using biographical data as taught by **Zizzamia** for the benefit of employing data sources to develop a global producer database and model predictive of the future profitability and productivity of licensed professionals such as insurance agents to increase future profits and productivity (**Zizzamia** especially i.e. ¶¶14, 18, & 21).

(10) Response to Argument

Claims 42-44 and 50-52 (Neuneier and Zizzamia in view of Tewari)

Appellant's arguments filed 1/12/2009 have been fully considered but they are not persuasive.

As a preface, a word of background about neural networks: it is well understood in the art that neural networks are universal function approximators which, given appropriate structure, are capable of representing any function (e.g. they meet or exceed the criteria of a universal Turing machine). They are capable of learning, adapting, modeling complex relationships between inputs and outputs, and/or finding patterns in data. In reviewing this rejection, the examiner encourages appellant to thoroughly survey the abundant neural network implementations and the diverse uses of neural networks that were well known to the person of ordinary skill in the art at the time the invention was made, as this should help advance prosecution.

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Regarding independent claims 42 and 50: In Re page 4, appellant argues that the cited prior art "lacks one or more limitations recited in each of independent claims 42 and 50 ... Neuneier fails to teach the limitation further including the system being for hiring an employee".

Examiner disagrees. Firstly, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Furthermore, MPEP §2106(II)(C), in part, states:

The subject matter of a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined. As a general matter, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. The following are examples of language that may raise a question as to the limiting effect of the language in a claim:

- (A) statements of intended use or field of use,
- (B) "adapted to" or "adapted for" clauses,
- (C) "wherein" clauses, or
- (D) "whereby" clauses.

This list of examples is not intended to be exhaustive. See also MPEP § 2111.04.

MPEP §2111.02(II), titled "PREAMBLE STATEMENTS RECITING PURPOSE OR INTENDED USE",

directly addresses the case of an intended use clause in the preamble of a claim, in part stating:

If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997) ("where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation");

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Examiner points out that the clause **“for hiring an employee”** is merely an intended use recited in the **preamble**, that the claimed structure is not altered by the intended use, and that the claimed limitations are neither defined by nor draw life and breath from the preamble. Therefore, **the preamble is not given any patentable weight** because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951). An intended use clause found in the preamble is not afforded the effect of a distinguishing limitation unless the body of the claim sets forth structure which refers back to, is defined by, or otherwise draws life and breath from the preamble. In re Casey, 152 USPQ 235 (CCPA 1967).

Therefore, appellant's allegation that the cited prior art fails to teach the “system being for hiring an employee” is **narrower than the claim requires**. In response to appellant's argument that the primary reference fails to teach “the system being for hiring an employee”, a recitation of the intended use of the claimed invention must result in a **structural** difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Furthermore, the combination of the cited prior art **does** teach applying the combined system to hiring an employee. Specifically, **Zizzamia** recites “recruiting, hiring and appointing new insurance agents” (**Zizzamia ¶8**) or “company would appoint an agent based on the agent's ability to produce future profits and increase productivity” (**Zizzamia ¶14**) or “identifying productive and profitable agents” (**Zizzamia ¶18**) or “used for various business purposes (e.g., recruiting ...) ... to generate a statistical model that can be used to predict future profitability and productivity of licensed professionals (the ‘predictive statistical model’)” (**Zizzamia ¶27**). In short, **Zizzamia** teaches using a statistical model to determine if a company should recruit/hire/appoint a new insurance agent (i.e. employee) based on information in the model.

The person of ordinary skill in the art at the time the invention was made would have found it obvious to apply the generic predictive modeling, using neural networks (instant claim 42) and fuzzy

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inferences (instant claim 50), described in **Neuneier** to hiring an employee as taught in **Zizzamia** for the business benefits described in **Zizzamia**, partially listed in the detailed rejection above, in combination with the specific predictive modeling benefits detailed in **Neuneier**, such as a “more powerful, better optimized fuzzy rule set” (**Neuneier** C2:14-20) with error under a predetermined threshold to control the quality of the result with increased reliability (**Neuneier** C3L5-40). This would merely constitute the simple substitution of one known predictive modeling element for another, and the person of ordinary skill in the art at the time the invention was made would have expected the predictable result of the substitution to be a more powerful, better optimized, more reliable predictive modeling in hiring an employee for higher future profits and productivity, as detailed in the rejection and explanations above.

In Re page 4, appellant further argues that the combination of cited prior art “lacks one or more limitations recited in each of independent claims 42 and 50” because “Zizz[]amia is not proper prior art as it is contemporary with the application and that the data and its usage is different in Zizz[]amia than in the application”.

Examiner disagrees. Appellant’s argument is conclusory in that it alleges that “the data and its usage is different”, but fails to give any factual examples of data or usage in **Zizzamia** that are different than in the instant application. Furthermore, appellant’s arguments are explicitly with regard to independent claims 42 and 50, which do not specify any particular type or nature of data, nor do they specify how or from where the data was obtained or what the data represents. Instant claims 42 and 50 are not drawn to specific data or usage. Examiner is not clear to which “data” or “usage” appellant is referring. **Zizzamia** does use different terminology, and the rejection above clearly maps that terminology to the instant claim. For example, the rejection maps **Zizzamia’s** “recruiting”, “hiring”, and “appointing” to the instantly claimed “hiring”; and the rejection maps **Zizzamia’s** “insurance agents”, “agents”, “professionals” to the instantly claimed “employee”. Examiner asserts that this mapping and the rejection as a whole are reasonable.

In Re page 4, appellant further argues that the combination of cited prior art “lacks one or more limitations recited in each of independent claims 42 and 50” because “Tewari is not proper prior art as it is contemporary with the application and that the data and its usage is different in”.

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Examiner disagrees. Appellant's argument is conclusory in that it alleges that "the data and its usage is different", but fails to give any factual examples of data or usage in **Tewari** that are different than in the instant application. Furthermore, appellant's arguments are explicitly with regard to independent claims 42 and 50, which do not specify any particular type or nature of data, nor do they specify how or from where the data was obtained or what the data represents. Instant claims 42 and 50 are not drawn to specific data or usage. Examiner is not clear to which "data" or "usage" appellant is referring. For example, the rejection maps **Tewari's** "binary probability predictions" to the instantly claimed "two states". Examiner asserts that this mapping is reasonable.

In Re page 4, appellant argues that the "combining of Tewari to rejection these claims are wrong since Tewari deals with a method for diagnosing and staging prostate cancer".

Examiner disagrees. As described in detail above, the combination of **Neuneier** and **Zizzamia** is directed to a neural network predictive modeling system for hiring insurance agents (e.g. employees). However, this combination teaches that the way the system does this is by scoring/rating the potential agents (see **Zizzamia** especially i.e. ¶2 or ¶13 or ¶19 or ¶26 or ¶31 or ¶¶36-41 or ¶¶93-112), giving examples of classifying the potential agents into ten groups (see **Zizzamia** especially i.e. "sorted by the score assigned to each by the predictive statistical model and divided in groups of equal size, typically ten" ¶38 or "data set is then sorted by the score, from lowest to highest score. The validation sample can be divided into ten regions of equal size, i.e., deciles, but other sizes can be employed." ¶100). Simply put, the combination of **Neuneier** and **Zizzamia** teaches that the number of result states is a arbitrary design choice, but only gives the example of "ten" classification states, ordered according to expected profitability of the prospective agent.

Furthermore, the instant claims do *not* stipulate "exactly two states" or "only two states", so the examiner could have merely stated that the combination of **Neuneier** and **Zizzamia** teach the required two states (as well as additional states that would **not** impact the ability of the cited prior art to be mapped appropriately to the instant claims).

Although the number of result states is understood to be a design choice, and the combination of **Neuneier** and **Zizzamia** indeed teaches it could be "ten", which would at least include the "two states"

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claimed, the examiner seeks to advance prosecution compactly by ensuring there is **no** dispute regarding the capability of the predictive neural network system cited to result in two output states.

Tewari is directed to a predictive modeling system comprising a neural network which is recited to classify data into two classes (e.g. "two states") (see **Tewari** especially i.e. C9:1-6 or "probabilistic Neural Network (PNN) separates data into a specified number of output categories ... PNNs are known for their ability to train quickly on sparse data sets and separate data into a specified number of output categories" C11:14-55 or "binary probability predictions" C12:60-C13:5 or Figure 1). Figure 1 of **Tewari** clearly shows **Tewari** teaching a neural network receiving input information about individuals (e.g. age, intelligence, education, income, etc.) and outputting a binary classification consisting of "winner" or "loser". Examiner asserts that the person of ordinary skill in the art at the time the invention was made would have clearly understood the benefit of combining the two state output of **Tewari** with the combined teachings of **Neuneier** and **Zizzamia** as detailed above for the benefit of quickly training and separating data into a specified number of output categories (**Tewari** especially i.e. C11:40-54).

In Re pages 4-5, appellant argues that the "Examiner's reasoning[]" is conclusory in that it begins with the claim limitation and from that infers a generic benefit in hindsight. This is not a rational underpinning that shows a connection by articulated reasoning of what those of ordinary skill knew, leading to the claim limitation at issue."

Examiner disagrees. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Examiner has clearly shown, with proper rationale exactly how the person of ordinary skill in the art at the time the invention was made would have understood the prior art, how it would have been combined, the rationales for the combination, and the clearly articulated reasoning behind the rejection based upon the person of ordinary skill in the art's understanding of the prior art at the time the invention was made.

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In Re page 5, appellant argues that "Neuneier, Zizza[m]ia and Tewari, separately or in combination with one another do not recite the required combination of limitations of independent claims 42 and 50."

Examiner disagrees. As clearly detailed above, the combination of **Neuneier**, **Zizzamia**, and **Tewari** adequately teaches each and every recited claimed limitation, and there is clearly articulated rationale, reasoning, and/or motivation to combine them in the recited manner.

Regarding dependent claims 43-44 and 51-52: In Re page 5, appellant argues that the "examiner has failed to establish a *prima facie* case of unpatentability for claims 41-44, depending on claim 42, and claims 51 and 52, depending on claim 50, and which recite further specific elements that have no reasonable correspondence to Neuneier, Zizza[m]ia and/or Tewari."

Examiner disagrees. As the detailed rejection of claims 42 and 50 has been properly maintained as detailed above, the rejections of claims 43-44 and 51-52 are likewise maintained. Furthermore, the examiner points out that claim 41 has been canceled, and that claim 42 does not depend upon itself.

The rejection of claims 42-44 and 50-52 is properly MAINTAINED.

Claims 45 and 53 (Neuneier and Zizzamia and Tewari in view of Mascarenhas)

Appellant's arguments filed 1/12/2009 have been fully considered but they are not persuasive. Regarding dependent claims 43-44 and 51-52: In Re page 4, appellant argues that the cited prior art "lacks one or more limitations recited in each of claims 45 and 53 ... Neuneier fails to teach the limitation further including the system being for hiring an employee".

Examiner disagrees. First of all, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Furthermore, as addressed in detail for independent claims 42 and 50 above, Examiner points out that the clause **"for hiring an employee"** is merely an intended use recited in the preamble, that the claimed structure is not altered by the intended use, and that the claimed limitations are neither

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defined by nor draw life and breath from the preamble. Therefore, **the preamble is not given any patentable weight** because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. See MPEP §2106(II)(C) and §2111.02(II) and Kropa v. Robie, 88 USPQ 478 (CCPA 1951) and In re Casey, 152 USPQ 235 (CCPA 1967). Therefore, appellant's allegation that the cited prior art fails to teach the "system being for hiring an employee" is **narrower than the claim requires**. In response to appellant's argument that the primary reference fails to teach "the system being for hiring an employee", a recitation of the intended use of the claimed invention must result in a **structural** difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Furthermore, the combination of the cited prior art **does** teach applying the combined system to hiring an employee. Specifically, see **Zizzamia** ¶8 or ¶14 or ¶18 or ¶27. In short, **Zizzamia** teaches using a statistical model to determine if a company should recruit/hire/appoint a new insurance agent (i.e. employee) based on information in the model. The person of ordinary skill in the art at the time the invention was made would have found it obvious to apply the generic predictive modeling, using neural networks (instant claim 45, dependent on claim 42) and fuzzy inferences (instant claim 53, dependent on claim 50), described in **Neuneier** to hiring an employee as taught in **Zizzamia** for the business benefits described in **Zizzamia**, partially listed in the detailed rejection above, in combination with the specific predictive modeling benefits detailed in **Neuneier**, detailed in the arguments. This would merely constitute the simple substitution of one known predictive modeling element for another, and the person of ordinary skill in the art at the time the invention was made would have expected the predictable result of the substitution to be a more powerful, better optimized, more reliable predictive modeling in hiring an employee for higher future profits and productivity, as detailed in the rejection and explanations above.

In Re pages 5-6, appellant argues that the cited prior art "lacks one or more limitations recited in each of claims 45 and 53 ... Neuneier and Tewari fail[] to teach where the data is personality data".

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Examiner disagrees. This is a conclusory argument as appellant has not provided facts to substantiate the allegation. Furthermore, the examiner has not mapped the data being personality data to either **Neuneier** or **Tewari**. The detailed rejection above clearly states that **Mascarenhas** teaches where said data is personality data (p1-13 especially i.e. “Personality Trait Topography” ¶63 or “psychological, behavioral, personality, or other attributes” ¶51). Furthermore, as detailed in the rejection above, merely naming or labeling the data does not change the functionality of the invention. This claim limitation is directed toward **non-functional descriptive material which does not further limit the claims.**

In Re pages 5-6, appellant further argues that the combination of cited prior art “lacks one or more limitations recited in each of independent claims 45 and 53” because “Zizz[]amia is not proper prior art as it is contemporary with the application and that the data and its usage is different in Zizz[]amia than in the application”.

Examiner disagrees. Appellant’s argument is conclusory in that it alleges that “the data and its usage is different”, but fails to give any factual examples of data or usage in **Zizzamia** that are different than in the instant application. Examiner is not clear to which “data” or “usage” appellant is referring. **Zizzamia** does use different terminology, and the rejection above clearly maps that terminology to the instant claim. For example, the rejection maps **Zizzamia’s** “recruiting”, “hiring”, and “appointing” to the instantly claimed “hiring”; and the rejection maps **Zizzamia’s** “insurance agents”, “agents”, “professionals” to the instantly claimed “employee”. Examiner asserts that this mapping and the rejection as a whole are reasonable. Furthermore, appellant’s arguments are explicitly with regard to claims 45 and 53, which stipulate only “where said data is personality data”. As clearly detailed in the rejection above, this limitation is not rejected based on **Zizzamia**, but instead has been clearly and explicitly mapped to **Mascarenhas**.

In Re pages 5-6, appellant argues that the “combining of Tewari to rejection these claims are wrong since Tewari deals with a method for diagnosing and staging prostate cancer”.

Examiner disagrees. As described in detail above, the combination of **Neuneier** and **Zizzamia** is directed to a neural network predictive modeling system for hiring insurance agents (e.g. employees).

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However, this combination teaches that the way the system does this is by scoring/rating the potential agents (see **Zizzamia** especially i.e. ¶2 or ¶13 or ¶19 or ¶26 or ¶31 or ¶¶36-41 or ¶¶93-112), giving examples of classifying the potential agents into ten groups (see **Zizzamia** especially i.e. “sorted by the score assigned to each by the predictive statistical model and divided in groups of equal size, typically ten” ¶38 or “data set is then sorted by the score, from lowest to highest score. The validation sample can be divided into ten regions of equal size, i.e., deciles, but other sizes can be employed.” ¶100). Simply put, the combination of **Neuneier** and **Zizzamia** teaches that the number of result states is a **design choice**, but only gives the example of “ten” classification states, ordered according to expected profitability of the prospective agent.

Furthermore, the instant claims do ***not*** stipulate “exactly two states” or “only two states”, so the examiner could have merely stated that the combination of **Neuneier** and **Zizzamia** teach the required two states (as well as additional states that would **not** impact the ability of the cited prior art to be mapped appropriately to the instant claims).

Although the number of result states is understood to be a design choice, and the combination of **Neuneier** and **Zizzamia** indeed teaches it could be “ten”, which would at least include the “two states” claimed, the examiner seeks to advance prosecution compactly by ensuring there is **no** dispute regarding the capability of the predictive neural network system cited to result in two output states.

Tewari is directed to a predictive modeling system comprising a neural network which is recited to classify data into **two classes** (e.g. “two states”) (see **Tewari** especially i.e. C9:1-6 or “probabilistic Neural Network (PNN) separates data into a specified number of output categories ... PNNs are known for their ability to train quickly on sparse data sets and separate data into a specified number of output categories” C11:14-55 or “binary probability predictions” C12:60-C13:5 or Figure 1). Figure 1 of **Tewari** clearly shows **Tewari** teaching a neural network receiving input information about individuals (e.g. age, intelligence, education, income, etc.) and outputting a binary classification consisting of “winner” or “loser”. Examiner asserts that the person of ordinary skill in the art at the time the invention was made would have clearly understood the benefit of combining the two state output of **Tewari** with the combined

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teachings of **Neuneier** and **Zizzamia** as detailed above for the benefit of quickly training and separating data into a specified number of output categories (**Tewari** especially i.e. C11:40-54).

In Re pages 5-6, appellant argues that “the combining of N[eu]neier and Zizz[am]ia and Tewari in view of Mascarenhas is a combination of four different references from different fields of [art] and is an overly burdensome Section 103 (a) rejection of Claims 45 and 53 given the large number of references and their different areas of art. These references would not have been combined by someone skilled in the arts.” In Re page 6, appellant also argues that the “Examiner’s reasoning in rejecting []dependent claims 45 and 53 appears to be that, since all the reference[s] involve[] the same field of endeavor, data processing[,] it would have been obvious to someone skilled in the art [to combine them]. This is an especially over broad conclusion and statement. It would be like linking in all areas of art that use paper or work or metal no matter how these materials are used given today’s state of the world.”

Examiner disagrees. In response to applicant’s argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

Additionally, the examiner asserts that all of the references are in the field of Artificial Intelligence, and more specifically to predictive data modeling/processing. A sub-field of Artificial Intelligence such as predictive data modeling/processing is certainly **not** analogous to “all areas of art that use paper or wood or metal”. For example, creating paper stationary, building wooden decks, and making horseshoes from metal are clearly divergent subject matter in which the artisans in question would likely know little about the fields of the other. Furthermore, the level of ordinary skill in each of these artisan niche trades may not even include graduating high school.

The ordinary level of skill for one in Artificial Intelligence is **at least** a Masters Degree (and often a PhD) in Electrical Engineering or Computer Science (or equivalent), including graduate level mathematics courses, plus several years of experience in the field. **That the ordinary level of skill in the art is so high must be taken into account when rejecting the claims.** The person of ordinary skill in the art of predictive data modeling/processing at the time the invention was made would have been

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educated in a vast variety of computer algorithms and how they could be practically applied to numerous real world applications. As such, all of the references cited would have been at the disposal of the person of ordinary skill in this art, and would have been considered obvious to combine.

Furthermore, examiner has not blindly combined references. Each additional reference has at least as much in common which the others as it is adding to them. The base reference, **Neuneier**, is directed to a predictive data modeling/processing system using a neural network and fuzzy inferences; algorithms discussed in the abstractly, applied to generic rules using a computer. (Examiner notes that appellant provided this reference in an IDS and has not disputed its teachings or inclusion in the combination.) The secondary reference, **Zizzamia**, is directed to a predictive data modeling/processing system that scores/classifies prospective employees/agents. As described in the detailed rejection and arguments above, the person of ordinary skill in the art at the time the invention was made would have found it obvious to apply the generic predictive modeling, using neural networks (instant claim 42) and fuzzy inferences (instant claim 50), described in **Neuneier** to hiring/scoring/classifying a prospective employee/agent as taught in **Zizzamia** for the business benefits described in **Zizzamia**, such as employing data sources to develop a global producer database and model predictive of the future profitability and productivity of licensed professionals such as insurance agents to increase future profits and productivity by appropriate hiring/recruiting (**Zizzamia** especially i.e. ¶¶ 14, 18, & 21), in combination with the specific predictive modeling benefits detailed in **Neuneier**, such as a "more powerful, better optimized fuzzy rule set" (**Neuneier** C2:14-20) with error under a predetermined threshold to control the quality of the result with increased reliability (**Neuneier** C3L5-40). This would merely constitute the simple substitution of one known predictive modeling element for another, and the person of ordinary skill in the art at the time the invention was made would have expected the predictable result of the substitution to be a more powerful, better optimized, more reliable predictive modeling in hiring an employee for higher future profits and productivity, as detailed in the rejection and explanations above.

Already possessing the combined invention of **Neuneier** and **Zizzamia** established in the detailed rejections and reasoning above, the person of ordinary skill in the art at the time the invention was made would be in possession of a system that predicts the expected profitability of potential employees/agents

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and classifies them into categories based on this profitability, teaching that the number of result states is an arbitrary **design choice**, but only gives the example of “ten” classification states, ordered according to expected profitability of the prospective agent. **Tewari** is also directed to a predictive modeling system comprising a neural network which is recited to classify data into two classes (e.g. “two states”) (see **Tewari** especially i.e. C9:1-6 or “probabilistic Neural Network (PNN) separates data into a specified number of output categories” C11:14-55 or C12:60-C13:5 or Figure 1). Figure 1 of **Tewari** clearly shows **Tewari** teaching a neural network receiving input information about individuals (e.g. age, intelligence, education, income, etc.) and outputting a binary classification consisting of “winner” or “loser”. Examiner asserts that the person of ordinary skill in the art at the time the invention was made would have clearly understood the benefit of combining the two state output of **Tewari** with the combined teachings of **Neuneier** and **Zizzamia** as detailed above for the benefit of quickly training and separating data into a specified number of output categories (**Tewari** especially i.e. C11:40-54). This would merely constitute the simple substitution of one known predictive modeling element for another, and the person of ordinary skill in the art at the time the invention was made would have expected the predictable result of the substitution to be a more powerful, better optimized, more reliable predictive modeling in hiring an employee for higher future profits and productivity, the system being quickly trained and potential employees separated into two specified output categories, as detailed in the rejection and explanations above.

Already possessing the combined invention of **Neuneier**, **Zizzamia**, and **Tewari** established in the detailed rejections and reasoning above, the person of ordinary skill in the art at the time the invention was made would be in possession of a system that predicts the expected profitability of potential employees/agents and classifies them into two categories based on this profitability. In other words, one has a system that helps select employees that are good for the company based on at least one particular metric. **Mascarenhas** is directed to processing personality data (**Mascarenhas** especially i.e. ¶¶7-11 or ¶51 or ¶63 or ¶69-91 or ¶118 or ¶184) to enable potential employers to target their ads or for employment matching, etc. (**Mascarenhas** especially i.e. ¶Abstract or ¶8 or ¶78 or ¶90 or ¶93). The examiner finds that the person of ordinary skill in the art at the time the invention was made would have understood both

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Mascarenhas and the combination of **Neuneier**, **Zizzamia**, and **Tewari** to be directed to predictive data modeling/processing for the purpose of employment matching, and therefore would have found them extremely obvious to combine. This would merely constitute the simple substitution of one known predictive modeling element for another, and the person of ordinary skill in the art at the time the invention was made would have expected the predictable result of the substitution to be a more powerful, better optimized, more reliable predictive modeling in targeting and hiring an employee that best match the criteria of an employer, the system being quickly trained and potential employees being separated into two specified output categories, as detailed in the rejection and explanations above.

The examiner has provided a clearly reasoned detailed rationale explaining the combination of the cited references that would have been obvious to the person of ordinary skill in the art at the time the invention was made. Appellant's allegation that adding the fourth reference of **Mascarenhas** to the combination of **Neuneier**, **Zizzamia**, and **Tewari** is not supported by the facts about the art at hand.

In Re page 6, appellant argues that the "Examiner's reasoning[] is conclusory in that it begins with the claim limitation and from that infers a generic benefit in hindsight. This is not a rational underpinning that shows a connection by articulated reasoning of what those of ordinary skill knew, leading to the claim limitation at issue."

Examiner disagrees. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Examiner has clearly shown, with proper rationale exactly how the person of ordinary skill in the art at the time the invention was made would have understood the prior art, how it would have been combined, the rationales for the combination, and the clearly articulated reasoning behind the rejection based upon the person of ordinary skill in the art's understanding of the prior art at the time the invention was made.

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In Re page 7, appellant argues that “Neuneier, Zizza[m]ia, Mascarenhas and Tewari, separately or in combination with one another do not recite the required combination of limitations of []dependent claims 45 and 53” and that “examiner has failed to establish a *prima facie* case of unpatentability for claim 45, depending on claim 42, and claim 53, depending on claim 50, and which recite further specific elements that have no reasonable correspondence to Neuneier, Zizza[m]ia, Mascarenhas and/or Tewari.”

Examiner disagrees. As clearly detailed above, the combination of **Neuneier**, **Zizzamia**, **Tewari**, and **Mascarenhas** adequately teaches each and every recited claimed limitation, and there is clearly articulated rationale, reasoning, and/or motivation to combine them in the recited manner.

The rejection of claims 45 and 53 is properly MAINTAINED.

Claims 46-47 and 49 (Neuneier in view of Mascarenhas)

Appellant’s arguments filed 1/12/2009 have been fully considered but they are not persuasive. In Re page 7, appellant argues that “[r]egarding claims 46-47 and 49 depending on independent claim 42, as noted above, Neuneier and Mascarenhas fail to disclose or even suggest the required combination of limitations of claims 46-47 and 49, and lacks one or more limitations recited in claims 46-47 and 49 [] in at least the following respects ... Neuneier fails to teach the limitation further including the system being for hiring an employee which is the basis for the Applicant’s invention. The combining of Mascarenhas to reject[] these claims [is] wrong since Mascarenhas deals with using psychological significance pattern information for matching with [] target information which also does not address the hiring of an employee.”

Examiner disagrees. First of all, examiner points out that claims 46-47 and 49 are **not** dependent upon independent claim 42. Rather, claim 46 is an independent claim, upon which claims 47 and 49 depend.

Furthermore, as addressed in detail for independent claims 42 and 50 above, Examiner points out that the clause “**for hiring an employee**” is merely an intended use recited in the preamble, that the claimed structure is not altered by the intended use, and that the claimed limitations are neither defined by nor draw life and breath from the preamble. Therefore, **the preamble is not given any patentable weight** because it has been held that a preamble is denied the effect of a limitation where the

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claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. See MPEP §2106(II)(C) and §2111.02(II) and Kropa v. Robie, 88 USPQ 478 (CCPA 1951) and In re Casey, 152 USPQ 235 (CCPA 1967). Therefore, appellant's allegation that the cited prior art fails to teach the "system being for hiring an employee" is **narrower than the claim requires**. In response to appellant's argument that the primary reference fails to teach "the system being for hiring an employee", a recitation of the intended use of the claimed invention must result in a **structural** difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Furthermore, the combination of the cited prior art **does** teach applying the combined system to hiring an employee. Specifically, see **Mascarenhas** teaches applying the system for employment matching (**Mascarenhas** especially i.e. ¶Abstract or ¶8 or ¶78 or ¶90 or ¶93).

In Re page 7, appellant argues that "Neuneier or Mascarenhas either separately or in combination with one another ... do not teach the limitations of independent claims [] 46-47 and 49, the examiner has failed to establish the required *prima facie* case of unpatentability" and that "examiner has failed to establish a *prima facie* case of unpatentability for claims [] 46-47 and 49 depending on claim 42 which recite further specific elements that have no reasonable correspondence to Neuneier or Mascarenhas."

Examiner disagrees. First of all, examiner reiterates that claims 46-47 and 49 are **not** dependent upon independent claim 42. Rather, claim 46 is an independent claim, upon which claims 47 and 49 depend. As clearly detailed above, the combination of **Neuneier** and **Mascarenhas** adequately teaches each and every recited claimed limitation, and there is clearly articulated rationale, reasoning, and/or motivation to combine them in the recited manner.

The rejection of claims 46-47 and 49 is properly MAINTAINED.

Claim 48 (Neuneier and Mascarenhas in further view of Zizzamia)

Appellant's arguments filed 1/12/2009 have been fully considered but they are not persuasive. In Re pages 7-8, appellant argues that "[r]egarding claim 48 depending on independent claim 42, as noted above, Neuneier, Zi[zzam]ia and Mascarenhas fail to disclose or even suggest the required combination of limitations of claim 48 in at least the following respects ... Neuneier fails to teach the limitation further including the system being for hiring an employee which is the basis for the Applicant's invention. The combining of Mascarenhas to reject[] these claims [is] wrong since Mascarenhas deals with using psychological significance pattern information for matching with [] target information which also does not address the hiring of an employee."

Examiner disagrees. First of all, examiner points out that claim 48 is **not** dependent upon independent claim 42. Rather, claim 48 is dependent upon independent claim 46.

Furthermore, as addressed in detail for independent claims 42 and 50 above, Examiner points out that the clause **"for hiring an employee"** is **merely an intended use recited in the preamble**, that the claimed structure is not altered by the intended use, and that the claimed limitations are neither defined by nor draw life and breath from the preamble. Therefore, **the preamble is not given any patentable weight** because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. See MPEP §2106(II)(C) and §2111.02(II) and Kropa v. Robie, 88 USPQ 478 (CCPA 1951) and In re Casey, 152 USPQ 235 (CCPA 1967). Therefore, appellant's allegation that the cited prior art fails to teach the "system being for hiring an employee" is **narrower than the claim requires**. In response to appellant's argument that the primary reference fails to teach "the system being for hiring an employee", a recitation of the intended use of the claimed invention must result in a **structural** difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

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Furthermore, the combination of the cited prior art **does** teach applying the combined system to hiring an employee. Specifically, see **Mascarenhas** teaches applying the system for employment matching (**Mascarenhas** especially i.e. ¶Abstract or ¶8 or ¶78 or ¶90 or ¶93).

In Re pages 7-8, appellant argues that “Neuneier[] and Mascarenhas fails to teach [the] limitation where the data is biographical data. The combination of Zi[zzam]ia which teaches a portable data processing terminal for use in a radio frequency communications network [] is not proper as it does not relate to the field of the invention.”

Examiner disagrees. **Zizzamia** (USPGP 2004/0054553) is **not** directed to a “portable data processing terminal for use in a radio frequency communications network” as alleged by appellant. Rather, **Zizzamia** is directed to a predictive modeling system for hiring employees. Specifically **Zizzamia** recites “recruiting, hiring and appointing new insurance agents” (**Zizzamia** ¶8) or “company would appoint an agent based on the agent’s ability to produce future profits and increase productivity” (**Zizzamia** ¶14) or “identifying productive and profitable agents” (**Zizzamia** ¶18) or “used for various business purposes (e.g., recruiting ...) ... to generate a statistical model that can be used to predict future profitability and productivity of licensed professionals (the ‘predictive statistical model’)” (**Zizzamia** ¶27). In short, **Zizzamia** teaches using a statistical model to determine if a company should recruit/hire/appoint a new insurance agent (i.e. employee) based on information in the model, and it is therefore squarely in the field of both the instant invention and of the combination of **Neuneier** and **Mascarenhas**.

Additionally, **Zizzamia** **does** teach “where said data is biographical data”, at especially i.e. “historical producer data” ¶19, as detailed in the rejection above. The historical producer data is described in **Zizzamia** to be a historical record of the past performance of at least one prospective employee/agent, which the person of ordinary skill in the art at the time the invention was made would have clearly understood to be “biographical data” for that prospective employee/agent.

Furthermore, as detailed in the rejection above, merely naming or labeling the data does not change the functionality of the invention. This claim limitation is directed toward **non-functional descriptive material which does not further limit the claims.**

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In Re page 8, appellant further argues that “Zizz[]amia is not proper prior art as it is contemporary with the application and that the data and its usage is different in Zizz[]amia than in the application”.

Examiner disagrees. Appellant’s argument is conclusory in that it alleges that “the data and its usage is different”, but fails to give any factual examples of data or usage in **Zizzamia** that are different than in the instant application. Examiner is not clear to which “data” or “usage” appellant is referring. **Zizzamia** does use different terminology, and the rejection above clearly maps that terminology to the instant claim. For example, the rejection maps **Zizzamia’s** “recruiting”, “hiring”, and “appointing” to the instantly claimed “hiring”; and the rejection maps **Zizzamia’s** “insurance agents”, “agents”, “professionals” to the instantly claimed “employee”. Furthermore, appellant’s arguments are explicitly with regard to dependent claim 48, which is directed to “where said data is biographical data”. Examiner acknowledges that **Zizzamia** does not explicitly recited “biographical” data, but has clearly mapped **Zizzamia’s** “historical producer data” to the instantly claimed “biographical data” as detailed in the rejection above. Examiner asserts that this mapping and the rejection as a whole are reasonable.

In Re page 8, appellant argues that “Neuneier, Zi[zzam]ia and Mascarenhas either separately or in combination with one another ... do not teach the limitations of independent claim 48, the examiner has failed to establish the required *prima facie* case of unpatentability” and that “examiner has failed to establish a *prima facie* case of unpatentability for claim 48 depending on claim 42 which recite further specific elements that have no reasonable correspondence to Neuneier, Zi[zzam]ia, and/or Mascarenhas.”

Examiner disagrees. First of all, examiner reiterates that claim 48 is not dependent upon independent claim 42. Rather, claim 48 is dependent upon independent claim 46.

As clearly detailed above, the combination of **Neuneier**, **Zizzamia**, and **Mascarenhas** adequately teaches each and every recited claimed limitation, and there is clearly articulated rationale, reasoning, and/or motivation to combine them in the recited manner.

The rejection of claims 48 is properly MAINTAINED.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Examiner Benjamin Buss

Examiner, Art Unit 2129

/B. B./ July 27, 2009

Conferees:

/David R Vincent/

Supervisory Patent Examiner, Art Unit 2129

/Paul L Rodriguez/

Supervisory Patent Examiner, Art Unit 2123